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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/625,014	07/25/2000	Michael R. Sogard	PA0286-US/11269.19	7165

7590 08/26/2003
Steven G Roeder
5560 Chelsea Avenue
La Jolla, CA 92037

EXAMINER

JONES, JUDSON

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/625,014	Applicant(s) SOGARD ET AL.	
	Examiner Judson H. Jones	Art Unit 2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,8,12,15,18,23-25,30,34,39,44,45,48,51 and 54 is/are rejected.
- 7) ☒ Claim(s) 4-7,9-11,13,14,16,17,19-22,26-29,31-33,35-38,40-43,46,47,49,50,52,53 and 55-58 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's arguments with respect to claims 1, 2, 8, 12-24, 30, 34-45 and 48 have been considered but are moot in view of the new ground(s) of rejection.

Oath/Declaration

The revised oath is accepted.

Citations of Prior Art

The prior art cited by applicant has been reviewed and the two signed IDS papers are enclosed.

Claim Objections

Claim 7 is objected to because of the following informalities: The phrase, "substantially equal and oppose to force" is not proper English. There should be an article such as "a" or "the" in front of "force" and "oppose" is the wrong verb tense. "Substantially equal and opposed to a force" would be proper, as would be "substantially equal and opposite to a force". Appropriate correction is required.

Claims 11, 29, 33, 47 and 50 are objected to because of the following informalities: The phrase "substantially equal and oppose to a force" is not proper English. Appropriate correction is required.

Claim 15 is objected to because of the following informalities: Claim 1 recited a motor including a magnet component, the magnet being surrounded by a magnetic field. Claim 15 takes only the conductor component of claim 1, puts the conductor component in a linear motor and adds a magnet component including a magnet surrounded by a magnetic field. Taking limitations

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out of a claim only to add them back in is confusing. It would be clearer if claim 15 recited the motor of claim 1 wherein the motor is a linear motor. Appropriate correction is required.

Claims 39 and 40 are objected to because of the following informalities: The phrase "the linear motor" lacks antecedent basis as claim 23 only refers to a brushless electric motor and does not specify whether the motor is rotary or linear. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 8, 12, 15, 18, 23-25, 30, 34, 39, 44, 45, 48, 51 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Kähköpuro et al. 6,305,501 B1. Kähköpuro et al. discloses a switched reluctance motor with a drive winding 16 and a magnet component 24, the magnet component being an iron structure magnetized by induction by the drive winding 16. The drive winding generates a stray magnetic field as described in column 4 lines 44-52. An auxiliary conductor array 28 generates an auxiliary magnetic field that interacts with the stray magnetic field and reduces the stray magnetic field as described in column 4 lines 52-54.

In regard to claims 8, 30 and 48, see Kähköpuro et al. column 5 lines 59-63.

In regard to claims 12, 34 and 51, see element 1 in figure 1.

In regard to claim 15, see Kähköpuro et al. column 1 lines 48-50.

In regard to claim 18, 39 and 54, a stage is defined as "one of a series of positions or stations one above the other" according to Merriam Webster's Collegiate Dictionary Tenth

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Edition copyright 1997. In Kähköpuro et al. the stage is viewed as being the elevator that stops at various floors of a building.

In regard to claim 23 and the limitation of a brushless electric motor, see Kähköpuro et al. column 5 lines 40-44.

Allowable Subject Matter

Claims 4-7, 9-11, 13, 14, 16, 17, 19-22, 26-29, 31-33, 35-38, 40-43, 46-53 and 55-58 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art of record does not disclose or teach an auxiliary conductor portion for a motor where the auxiliary conductor reduces the stray flux of the drive winding and where the auxiliary conductor substantially encircles the drive conductor as recited in claims 4, 26 and 46. The prior art of record does not disclose or teach an auxiliary conductor array for a motor wherein the auxiliary conductor array reduces the stray flux of the motor and includes a left transverse segment and a right transverse segment that is spaced apart from the left transverse segment, wherein when a current is directed through the auxiliary conductor array, the left transverse segment generates a force that is substantially equal and opposed to a force generated by the right transverse segment as recited in claims 7, 29 and 47. The prior art of record does not disclose or teach an auxiliary conductor array for a motor wherein the auxiliary conductor array reduces the stray flux of the motor and includes an upper longitudinal coil set, a lower longitudinal coil set, a left transverse coil set and a right transverse coil set that cooperate to substantially encircle the perimeter of the motor drive conductor array as recited in claims 9, 31

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and 49. The prior art of record does not disclose or teach an auxiliary conductor array for a motor wherein the auxiliary conductor array reduces the stray flux of the motor and includes a left transverse coil set and a right transverse coil set and wherein when a current is directed through the left transverse coil set and the right transverse coil set, the left transverse coil set generates a force that is substantially equal and opposed to a force generated by the right transverse coil set as recited in claims 11, 33 and 50. The prior art of record does not disclose or teach an auxiliary conductor array for a motor wherein the motor has a conductor housing and the conductor housing includes a conductor section that retains the motor drive conductor and the auxiliary conductor as recited in claims 13 and 35. The prior art of record does not disclose or teach an auxiliary conductor array for a motor wherein the auxiliary conductor array reduces the stray magnetic field by a factor of at least 100 as recited in claims 14 and 36. The prior art of record does not disclose or teach an auxiliary conductor array for a motor for reducing the stray flux of a motor wherein the magnet component includes a pair of spaced apart magnet arrays and the motor drive conductor component is positioned between the magnet arrays as recited in claim 16. The prior art of record does not disclose or teach an auxiliary conductor array for a motor for reducing the stray magnetic field where the auxiliary conductor component is positioned between the magnetic arrays as recited in claims 17, 37 and 52. The prior art of record does not disclose or teach an exposure apparatus in combination with the other features of claim 19, 40 and 55.

Any inquiry concerning this or earlier communications from the examiner should be directed to Judson H Jones whose telephone number is 703-308-0115. The examiner can normally be reached on 8-4:30 M-F. If attempts to reach the examiner are unsuccessful, the


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examiner's supervisor, Nestor Ramirez can be reached on 703-308-1371. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JHJ

8/20/2003


BURTON S. MULLINS
PRIMARY EXAMINER